

ABSTRACT

A well pumping system has a downhole rotary pump that drives a downhole reciprocating pump. The reciprocating pump is an intensifier, having a primary piston and a secondary piston of lesser diameter. A sequencing valve connects between the discharge of the rotary pump and the primary cylinder for alternately supplying well fluid from the rotary pump to the primary piston to stroke the primary and secondary pistons. The secondary piston pumps well fluid to the surface.